

BASF Aktiengesellschaft

March 30, 2001

NAE19991380US IB/SF/els

We claim:

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1. A process for increasing the elongation at break of moldings made from thermoplastic molding compositions comprising, based on the total of the amounts of components A and B and, where appropriate C and/or D, the entirety of which gives 100% by weight,

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- a: from 1 to 99% by weight of a particulate emulsion polymer with a glass transition temperature below 0°C and with a median particle size of from 50 to 1000 nm, as component A,

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- b: from 1 to 99% by weight of at least one amorphous or semicrystalline polymer, as component B,

- c: from 0 to 50% by weight of other thermoplastic polymers, as component C, and

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- d: from 0 to 50% by weight of fibrous or particulate fillers or mixtures of these, as component D,

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which comprises filtering that dispersion of component A obtained from an emulsion polymerization, to remove coagulated material, and then further processing the dispersion to give the thermoplastic molding composition.

2. A process as claimed in claim 1, wherein filters with filter sizes of from 5 to 400 mesh are used for the filtration.

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3. A process as claimed in claim 1, wherein the filtration is not carried out using pressure.
4. A process as claimed in claim 1, wherein bag filters, rotary-cylinder screening machines, horizontal pressure leaf filters, vibrating-cylinder screening machines, vibrating-tumbling screening machines or Atlantic filters with bag insert are used for the filtration.
5. A process as claimed in claim 1, wherein component A is a graft copolymer made from
- a1: from 1 to 99% by weight of a particulate graft base A1 with a glass transition temperature below 0°C,
- a2: from 1 to 99% by weight of a graft A2 made from the following monomers, the amounts being based on A2,
- a21: from 40 to 100% by weight of at least one vinyl aromatic monomer, as component A21,
- a22: from 0 to 60% by weight of units of at least one ethylenically unsaturated monomer, as component A22, and
- a23: from 0 to 30% by weight of other copolymerizable monomers, as component A23,

where the entirety of components A21, A22 and A23 gives 100% by weight,

and where the graft A2 is composed of at least one graft shell and the graft copolymer A has a median particle size of from 50 to 1000 nm.

- 5 6. A process as claimed in claim 5, wherein the molding composition comprises a butadiene rubber, acrylate rubber, EPDM rubber or silicone rubber, as particulate graft base A1.
7. A process as claimed in claim 6, wherein component A1 is composed of the following monomers:
- 10 a11: from 80 to 100% by weight of butadiene, of at least one C₁₋₈-alkyl acrylate or of mixtures of these, as component A11,
- 15 a12: from 0 to 20% by weight of at least one polyfunctional crosslinking monomer, as component A12, and
- a13: from 0 to 20% by weight of other copolymerizable monomers, as component A13,
- 20 where the entirety of components A11 to A13 gives 100% by weight.